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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,063	11/08/2005	Derek Ian Darley	COCH-0150-US1	2564
22506	7590	02/15/2007	EXAMINER	
JAGTIANI + GUTTAG 10363-A DEMOCRACY LANE FAIRFAX, VA 22030			NGUYEN, TRUC T	
			ART UNIT	PAPER NUMBER
			2833	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/15/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/529,063		DARLEY ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Truc T. T. Nguyen		2833	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 December 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) 8-11, 21, 23, 25-27 and 31-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 12, 13, 17-19, 22, 24 and 28-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/28/05</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-7, 12, 22 and 29-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Caracciolo (US 3,271,625).

Regarding claim 1, Caracciolo disclose a method of forming an electrically conducting feedthrough comprising the steps of:

(i) forming an electrically conductive structure (11) comprising a sacrificial component (14) and a non-sacrificial component (13) (Fig. 3);

(ii) coating (means *covering* by [www.m-w.com](http://www.m-w.com)) at least a portion of the non-sacrificial component with a relatively electrically insulating material (17); and

(iii) removing at least a portion of the sacrificial component from the electrically conductive structure (11) (Fig. 7).

Regarding claim 3. Caracciolo disclose the electrically insulating material (17) is coated on the non-sacrificial component (13) and not coated on to any portion of the sacrificial component (14) of the conductive structure (11).

Regarding claim 4, Cracciolo disclose the electrically conductive structure (11) is selected from the group comprising a metal, a metal alloy, an electrically conductive ceramic,

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an electrically conductive composite, and an intrinsically or extrinsically electrically conductive polymer.

Regarding claim 5, Caracciolo discloses the electrically conductive structure (11) is formed from a thin film (Fig. 3-4)(member 17 is about 0.04 inches thick, the conductive member 11 is a lot thinner than the member 17 as shown in Fig. 3-4 therefore it is a thin film).

Regarding claim 6, Caracciolo discloses the thin film electrically conductive structure 911) has a shape comprising two or more conductive elements (13) extending between respective transverse support members (14).

Regarding claim 7, Caracciolo discloses at least one of the conductive elements is linear (Fig. 3-4).

Regarding claim 12, Cracciolo disclose the shape of the electrical conductive structure (11) is formed in step (i) by punching the shape from a film of electrically conductive material.

Regarding claim 22, Cracciolo disclose the electrically insulating material is moulded around at least a portion of the conductive element.

Regarding claim 29, Cracciolo substantially disclosed the claimed invention except it is for use in a orifice wall of an unit.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitation. *Ex Parte Masham, 2 USPQ2d 1647 (1987)*.

Regarding claim 30, Cracciolo disclose the feedthrough comprised of one or more relative electrically conductive structures extending through and embedded within a relative electrically insulating body (Fig. 3-4).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 17, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caracciolo (US 3,271,625).

Regarding claim 2, Caracciolo substantially disclosed the claimed invention except for the material of the electrical insulating material is a ceramic material.

Regarding claim 17, Caracciolo substantially disclosed the claimed invention except for the material of the electrically conducting feedthrough is platinum.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the insulating material is ceramic and the conducting feedthrough is platinum, since it has been held that to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claim 24, Caracciolo disclose the electrically insulating material is moulded to both sides of the film and elongated member thereby encapsulating at least a portion of the member in the insulating material.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Caracciolo (US 3,271,625) in view of Zadno-Azizi et al. (US 5,904,893).

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Caraccilo substantially disclosed the claimed invention except for the electrically conductive structure is formed by using electrical discharge machining.

Zadno-Azizi et al. teach a method of cutting an article using electrical discharge machining.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use electrical discharge machine to cut the electrically conductive structure, as taught by Zadno-Azizi et al. for precisely cutting edge.

6. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Caracciolo (US 3,271,625) in view of Coffy (US 5,462,408).

Caraccilo substantially disclosed the claimed invention except for the electrically insulating material around the conductive structure is formed by using Power injection moulding method.

Coffy teach a powder injection moulding.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use powder injection moulding method to mould the insulating material around the conductive structure, as taught by Coffy for a fine and compact moulding structure.

#### ***Election/Restrictions***

7. Applicant has elected Specie 1 for prosecution. During the examination, the examiner discovers that claims 8-11 and 18-19 do not claim the feature of Specie 1.

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This invention (Specie 1) has been elected by the applicant for prosecution on the merits. Accordingly, claims 8-11 and 18-19 has been withdrawn from consideration as being directed to a non-elected invention.

In response to the applicant's argument about the restriction. The Inventions I and II are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a materially different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the electrical conductive structure contact can be make by different method other than punching (claim 12) or EDM (claim 13) method. Such other method are known as moulding, water jet cutting method.

The restriction is made FINAL.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Truc T. T. Nguyen whose telephone number is 571-272-2011. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on 571-272-2800 extension 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Truc T. T. Nguyen  
Primary Examiner  
Art Unit 2833

A handwritten signature in black ink, appearing to be 'Truc T. T. Nguyen', written over the printed name and title.